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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,206	11/18/2003	David Trastour	B-5307 621517-4	6031
22879 7590 05/02/2008 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER KEEFER, MICHAEL E	
			ART UNIT 2154	PAPER NUMBER
			NOTIFICATION DATE 05/02/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/717,206	Applicant(s) TRASTOUR ET AL.	
	Examiner MICHAEL E. KEEFER	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/1/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to the Response to Election/Restriction Requirement filed 7/24/2007. Claims 1-21 are pending, and claims 22-43 are withdrawn from consideration.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Election/Restrictions

3. Applicant's election with traverse of the restriction in the reply filed on 7/24/2007 is acknowledged. The traversal is on the ground(s) that the Examiner has not properly made the first test for restriction. This is not found persuasive because the groups are distinct and non-obvious in view of each other.

The requirement is still deemed proper and is therefore made FINAL.

4. Claims 22-43 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected group, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 7/24/2008.

Specification

5. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01. (see at

least page 1 <http://www.rosettanel.org>, also page 3,
<http://rosettanel.org/nextgenarchitecture> and <http://www.contivo.org>)

Claim Objections

6. Claims 8 and 9 are objected to because of the following informalities: the word constraints at the end of the claim is misspelled. Appropriate correction is required.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 20-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 20 and 21 appear to be directed solely to software per se, which is not a process, machine, manufacture or composition of matter.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trastour (Semantic Web Support for the Business-to-Business E-Commerce Lifecycle) in view of Dan et al. (US 2002/0178103), hereafter Dan.

Regarding **claims 1 and 20**, Trastour discloses:

A method of defining a common interactions protocol between two entities, the method comprising: inputting a description of each entity's messaging guidelines, the description including the entity's constraints on interacting with the other entity; (Page 14, Agreement formation states that various proposals are being made for an interaction (proposals are constraints on a prospective agreement))

calculating the union of the two descriptions; determining whether the union is satisfiable using a constraint resolver; (page 14, note that the union of all potential agreements (i.e. the constraints) is used to determine what agreements are compatible (i.e. satisfiable)

Trastour discloses all the limitations of claim 1 except for:

providing the intersection of the two descriptions as the common interactions protocol if the union is satisfiable; and

indicating where any incompatibility lies if the union is not satisfiable.

Dan teaches:

providing the intersection of the two descriptions as the common interactions protocol if the union is satisfiable; and ([0038] discloses combining like characteristics of two sets of constraints)

indicating where any incompatibility lies if the union is not satisfiable.

([0044-45] discloses evaluating the subsets of the union of constraints, and aborting when a union is not satisfiable, therefore informing the entities that the incompatibility lies with that subset.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Trastour and Dan in order to allow entities to automatically negotiate subsets of constraints.

Regarding **claim 6**, Trastour discloses:

6. A method according to Claim 1, wherein the messaging guidelines are input as instances of objects in an object-oriented description language.

(Trastour discloses that DAML+OIL is an object-oriented description language)

Regarding **claim 8**, Dan teaches:

8. A method according to Claim 1, wherein the providing step comprises providing a specific subset of the common interactions protocol as a set of syntactic constraints. ([0032] discloses syntactic constraints (i.e. the document-exchange protocol))

Regarding **claim 9**, Dan teaches:

9. A method according to Claim 1, wherein the providing step comprises providing a specific subset of the common interactions protocol as a set of semantic constraints. ([0034] discloses that roles are included, which are semantic constraints)

Regarding **claim 11**, Dan teaches:

11. A method according to Claim 1, further comprising adjusting at least one entity's constraints if an incompatibility has been identified and then repeating the inputting, converting, calculating determining and adjusting steps until the union is satisfiable. ([0045] discloses counter-offers)

Regarding **claim 12**, Trastour discloses:

12. A method according to Claim 1, wherein the constraint resolver comprises a description logic reasoner. (Page 14, A standard logics reasoner is disclosed in paragraph 4)

10. Claims 2-3, 7, 13-19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trastour and Dan as applied to claims 1 and 20 above, and further in view of Hellman et al. (US 2006/0167946), hereafter Hellman.

Trastour and Dan teach all the limitations of claims 2 and 21 except for converting the constraints into a semantic web ontology structure with a set of class hierarchies, properties and constraints.

Hellman teaches the conversion of XML schema into RDF schema. (See Col 13, lines 32-44)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Trastour and Dan with Hellman in order to make the system compatible with more platforms.

Regarding **claim 3**, Hellman teaches:

wherein the messaging guidelines are input as XML Schemas. (See Col 13, lines 32-44)

Regarding **claim 7**, Hellman teaches:

further comprising inputting additional context specific constraints from the entity into the structure. (See Col 13, lines 32-44)

wherein the semantic web ontology structure is expressed as a Resource Description Framework structure. (See Col 13, lines 32-44)

Regarding **claim 13**, Trastour teaches:

wherein the inputting step comprises:

specifying document constraints in a general way such that they are applicable to a plurality of specific instances/classes of objects/processes; (Pages 9-13 disclose specifying constraints in a general way)

and linking each constraint to a particular deployment context in which that constraint is to be applied; such that when a run-time solution of the interaction protocol is deployed, it can be decided depending on the deployment context whether or not each constraint applies to any document. (Pages 9-13 disclose linking constraints to specific objects or classes)

Regarding **claim 14**, Dan teaches:

wherein the messaging constraints are syntactic. ([0032] discloses syntactic constraints (i.e. the document-exchange protocol))

Regarding **claim 15**, Dan teaches

wherein the messaging constraints are semantic. ([0034] discloses that roles are included, which are semantic constraints)

Regarding **claim 16**, Trastour teaches:

wherein the deployment context comprises one or more elements from the set comprising the document, the sender, the receiver, the backend system, the

business process and the department. (page 10 teaches the context being the business process)

Regarding **claim 17**, Trastour teaches:

wherein the deployment contexts are expressed using Boolean logic between the elements. (page 10 teaches the using Boolean Logic)

Regarding **claim 18**, Trastour teaches:

wherein the specifying step comprises specifying constraints applicable to whole classes of objects/processes. (page 10 teaches having constraints apply to all kinds of sales and other objects)

Regarding **claim 19**, Trastour teaches

further comprising inheriting constraints in accordance with class/object relationships. (page 10 discloses having classes that are composed of other classes, i.e. inheritance)

11. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trastour, Dan, and Hellman as applied to claims 1-3 above, and further in view of Boulmakoul, et al. "Nile: Automating B2B Connections Between Trading Partners", hereafter Boulmakoul.

Trastour, Dan, and Hellman teach all the limitations of claims 3-4 except for using RosettaNet to define constraints and processes.

The general concept of providing PIP information, and RosettaNet schemas as constraints is well known in the art as taught by Boulmakoul. (see at least page 12)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Trastour, Dan, and Hellman with the general concept of providing RosettaNet information as constraints as taught by Boulmakoul in order to make the system more robust and supportive of further common B2B protocols.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL E. KEEFER whose telephone number is (571)270-1591. The examiner can normally be reached on Monday through Friday 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Nathan J. Flynn/

Supervisory Patent Examiner, Art Unit 2154